

EKSPERIMENTALNE METODE

Vaje

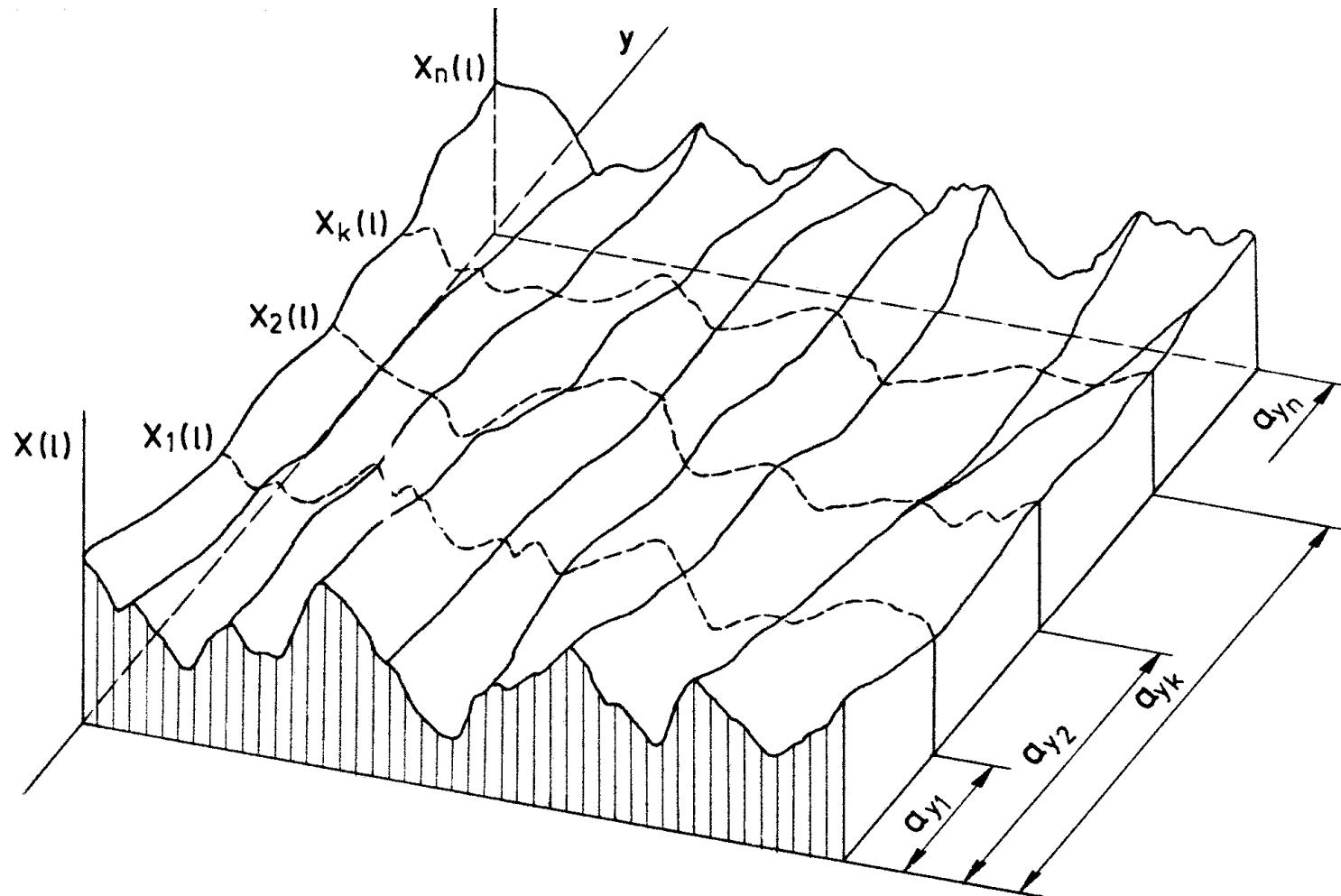
4. Vaja: VREDNOTENJE PROCESOV

NA PRIMERU MERJENJA
HRAPAVOSTI POVRŠIN

DEFINICIJA NALOGE:

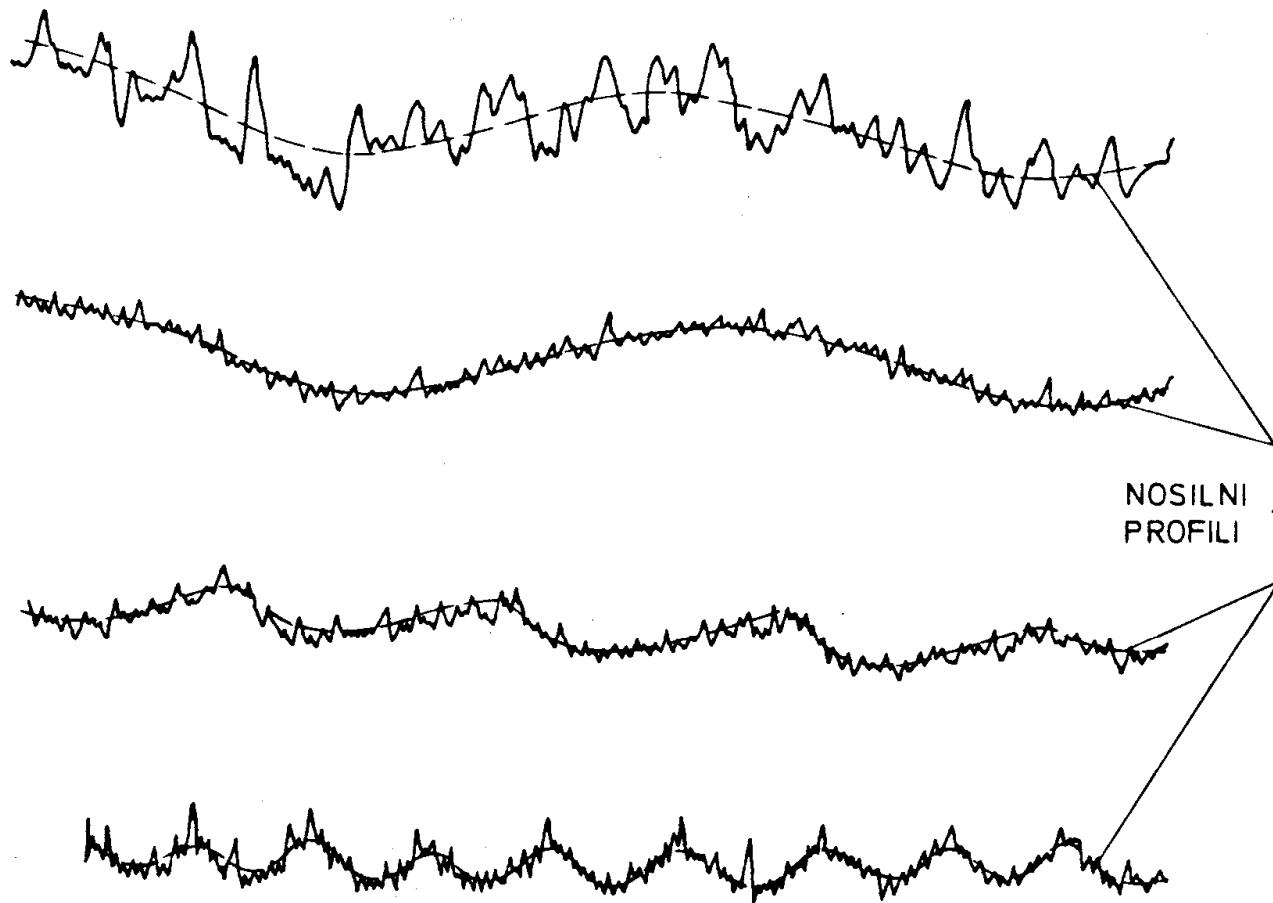
1. Eksperimentalno vrednotenje procesov
 - zbiranje, kontinuirana meritev - vzorčenje, shranjevanje
 - priprava – pretvorbe, kvalifikacija (stacionarnost, periodičnost, normalnost), analiza
2. Merjenje hrapavosti površin in vrednotenje površin:
 - z osnovnimi statističnimi veličinami (momenti)
 - parametri, ki se uporabljajo za popis stacionarnih naključnih procesov

Teoretične osnove



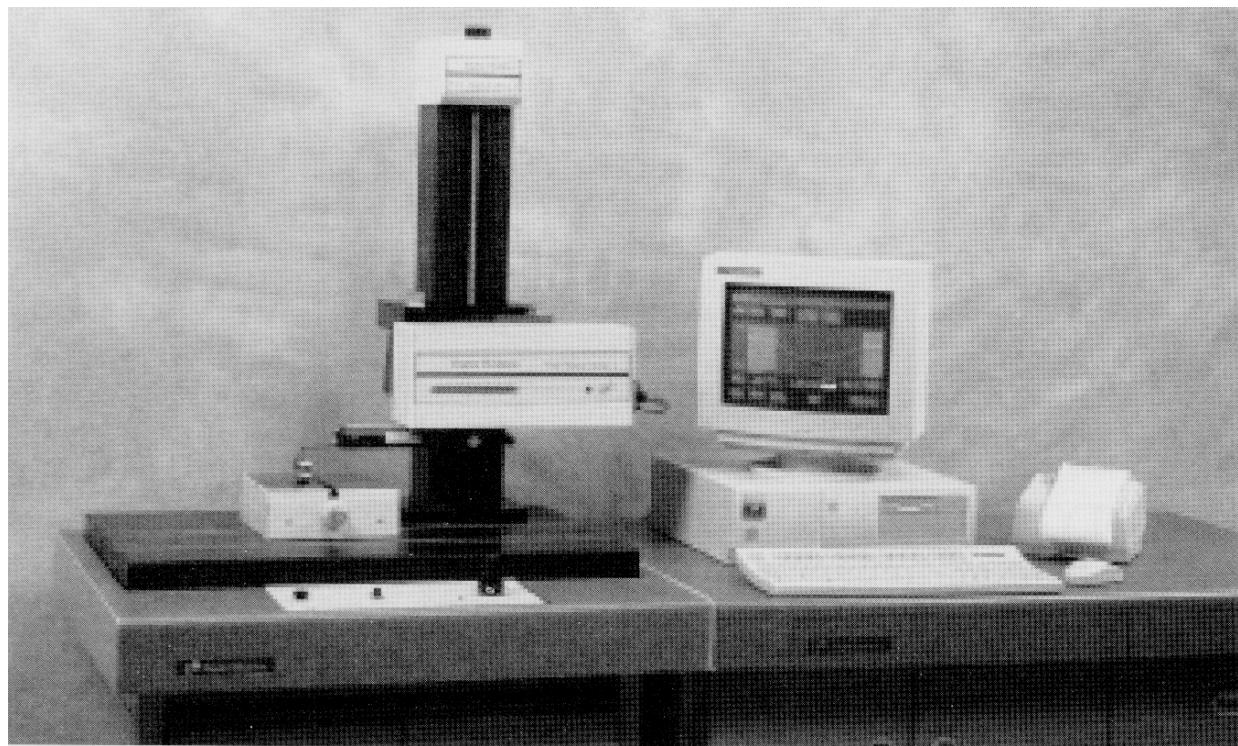
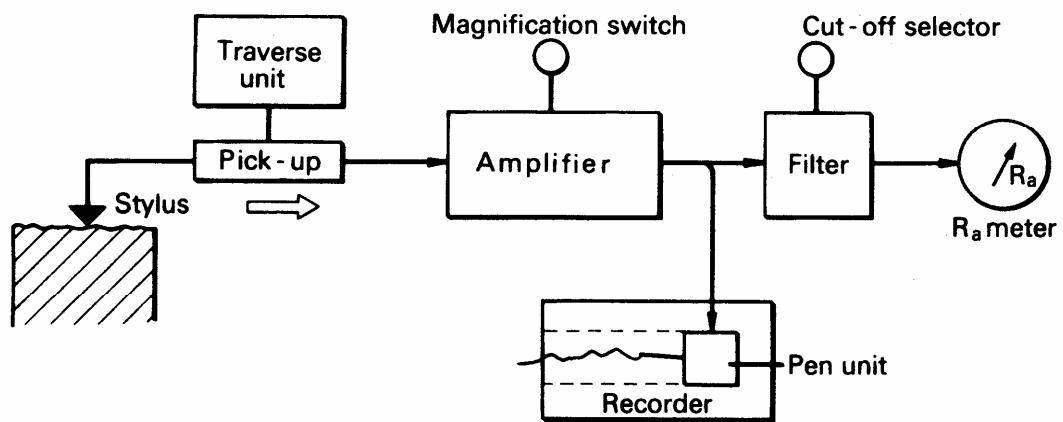
Prostorski model tehnične površine

Teoretične osnove

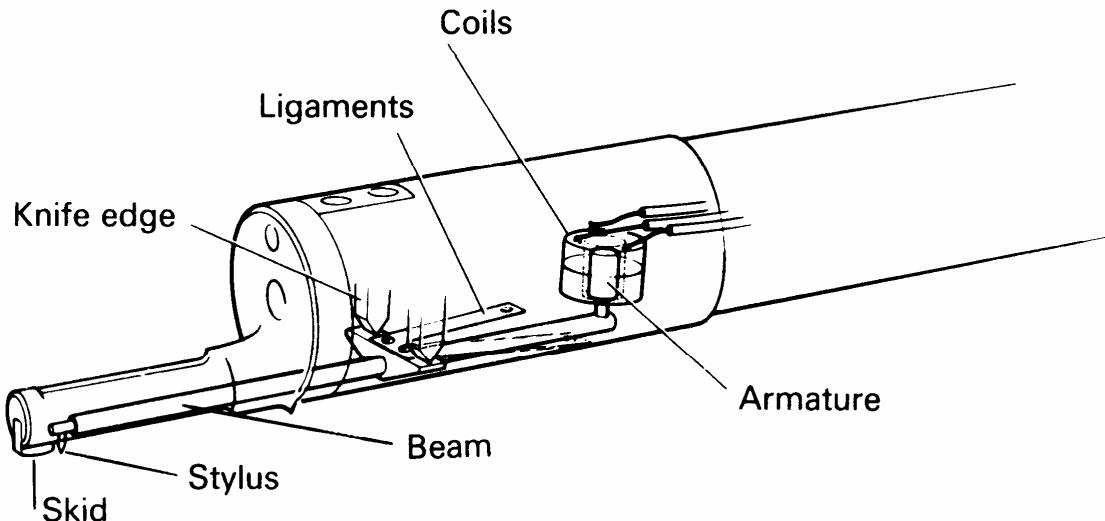


Modeli površin z različno hrapavostjo in valovitostjo

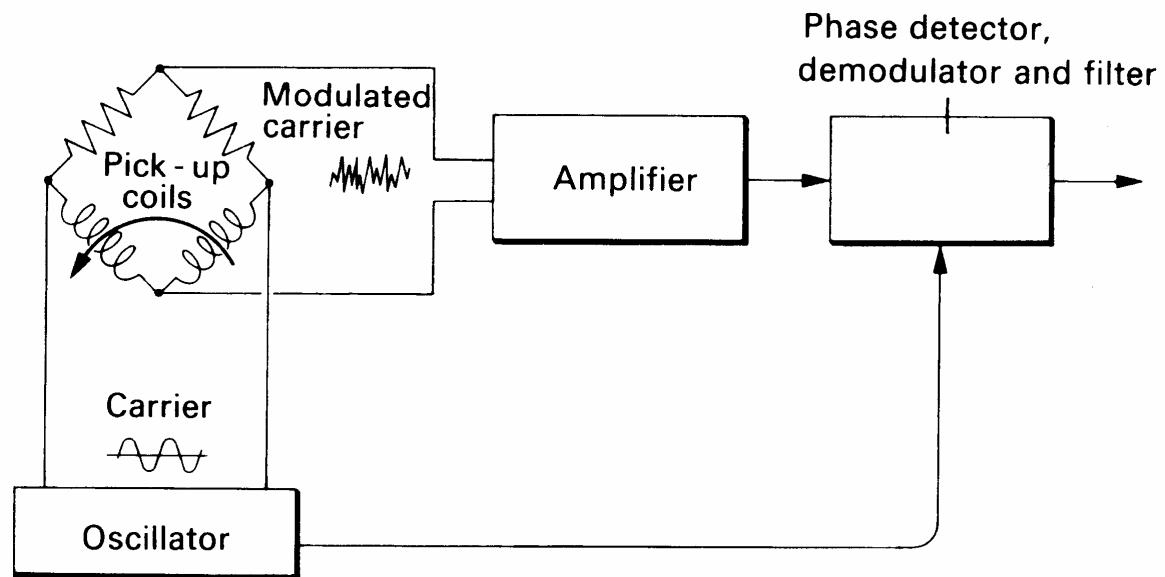
Talysurf



Tipalo

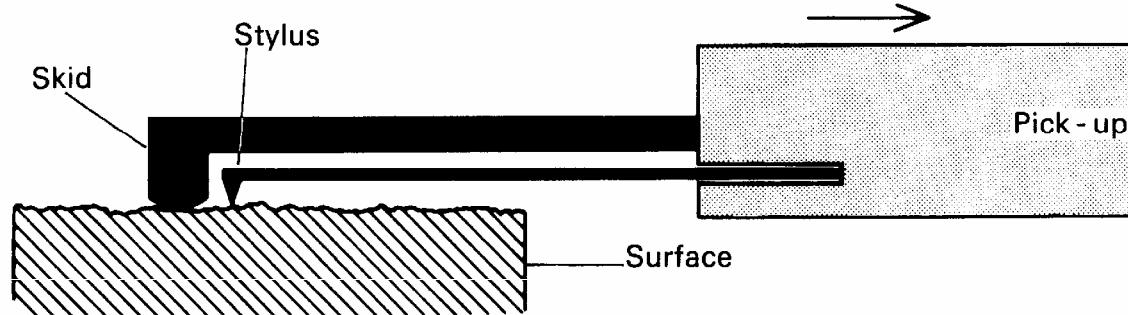


Variable inductance gauge

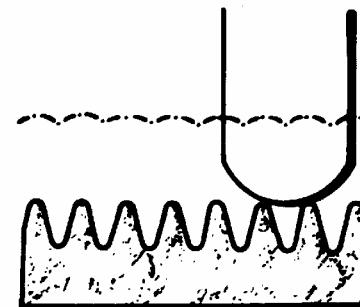


Schematic diagram of modulated carrier system

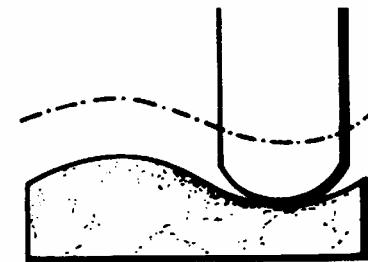
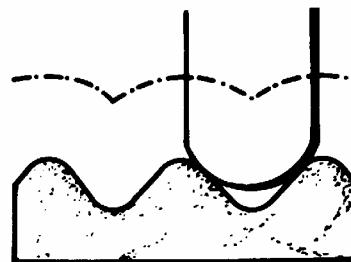
Pomen ščita



Gauge supported by a skid.

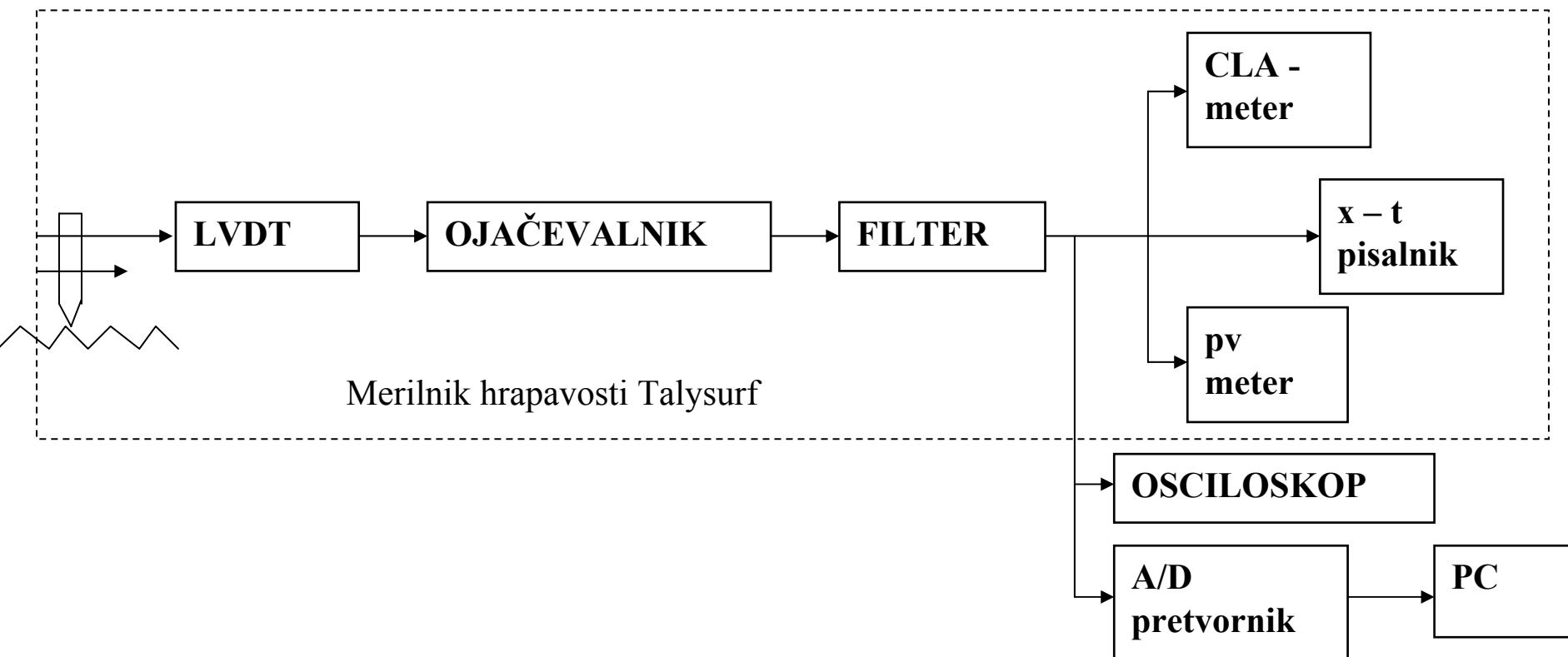


A skid supporting the gauge giving an almost straight line movement across the surface.



A rounded skid does not provide a serviceable datum if the surface irregularities are too widely spaced.

Merilni sistem – blokovni diagram



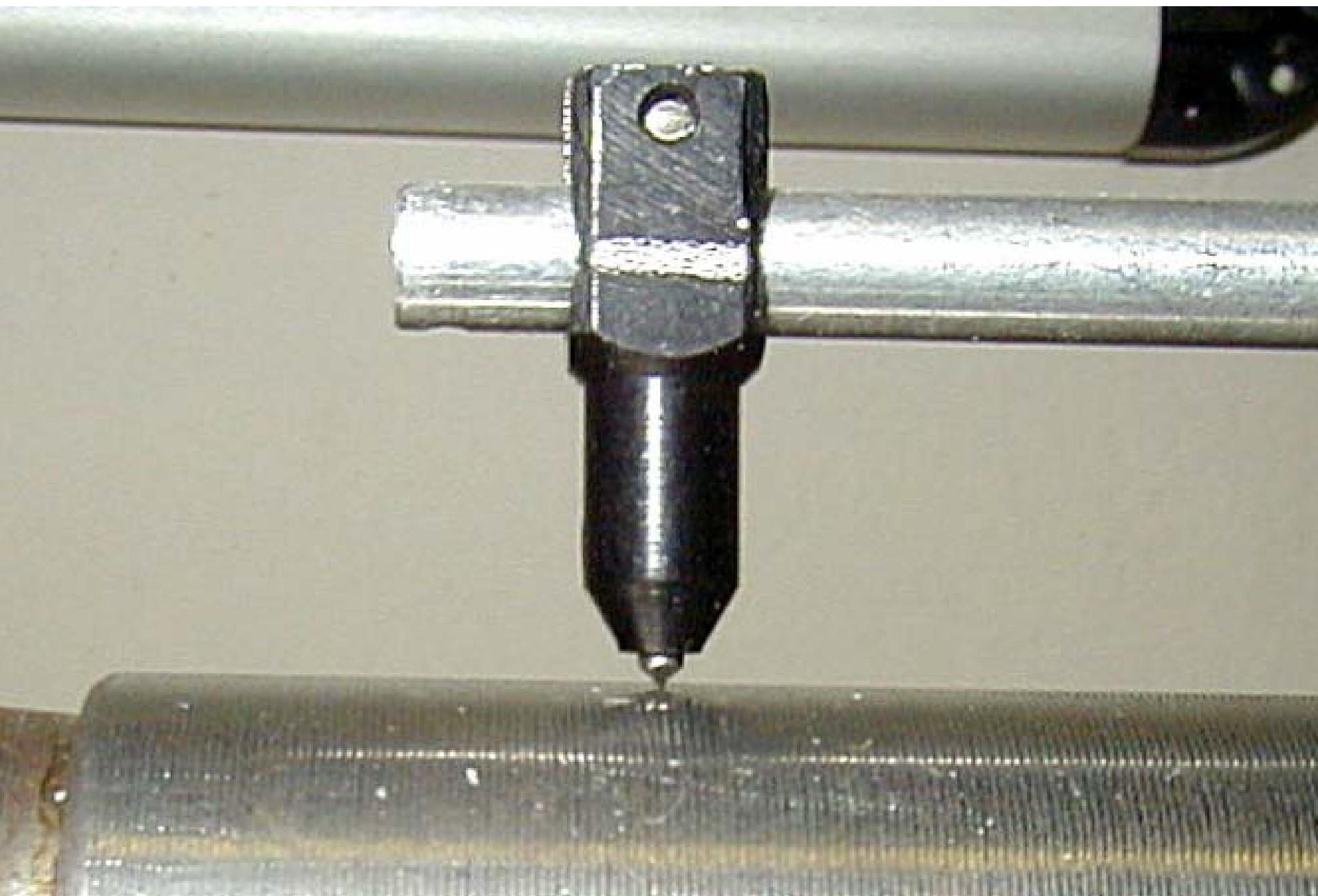
Merilni sistem



Tipalo s transportno enoto

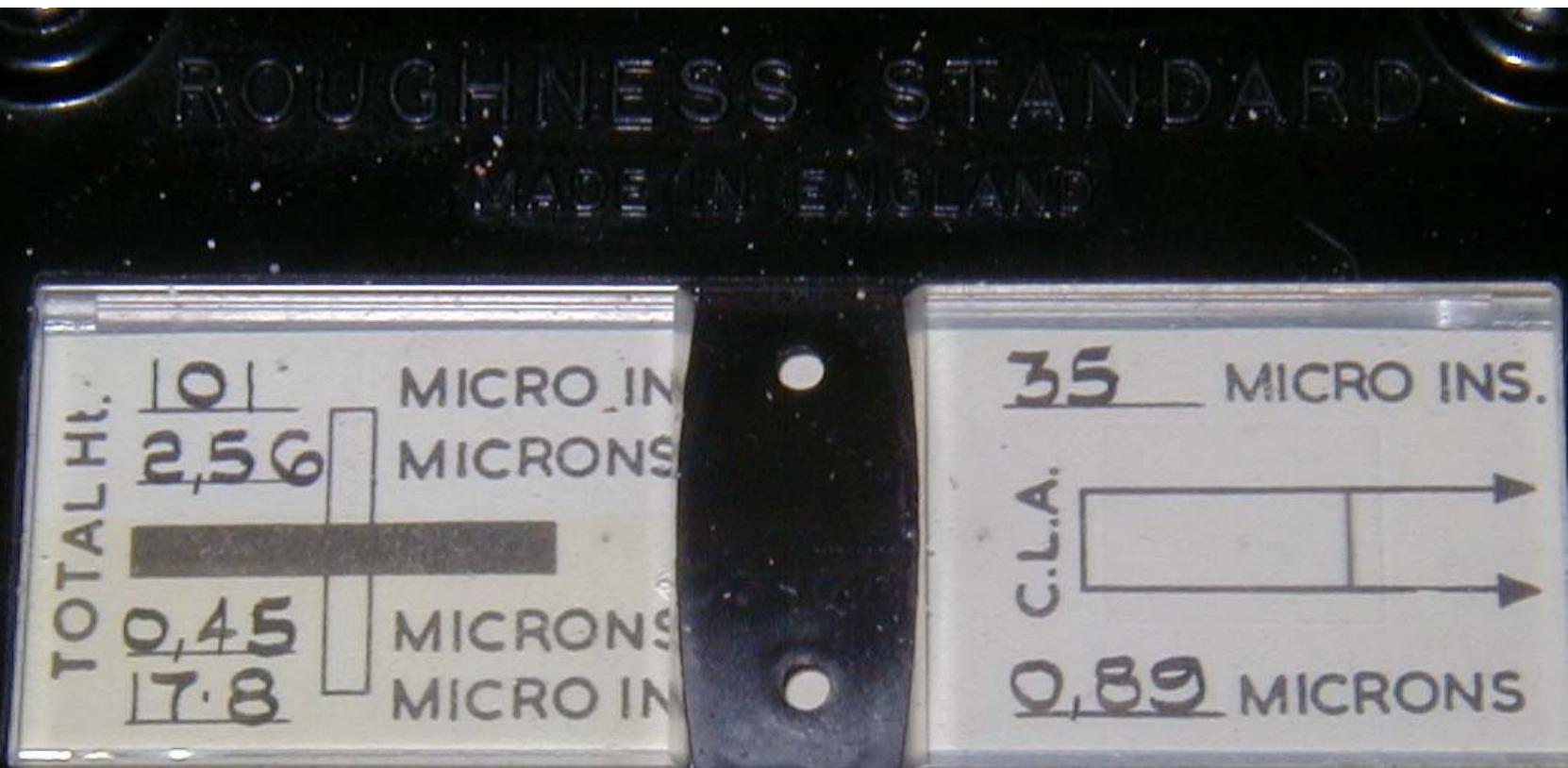


Tipalo – prosto vrtljivo



Tipalo – s ščitom

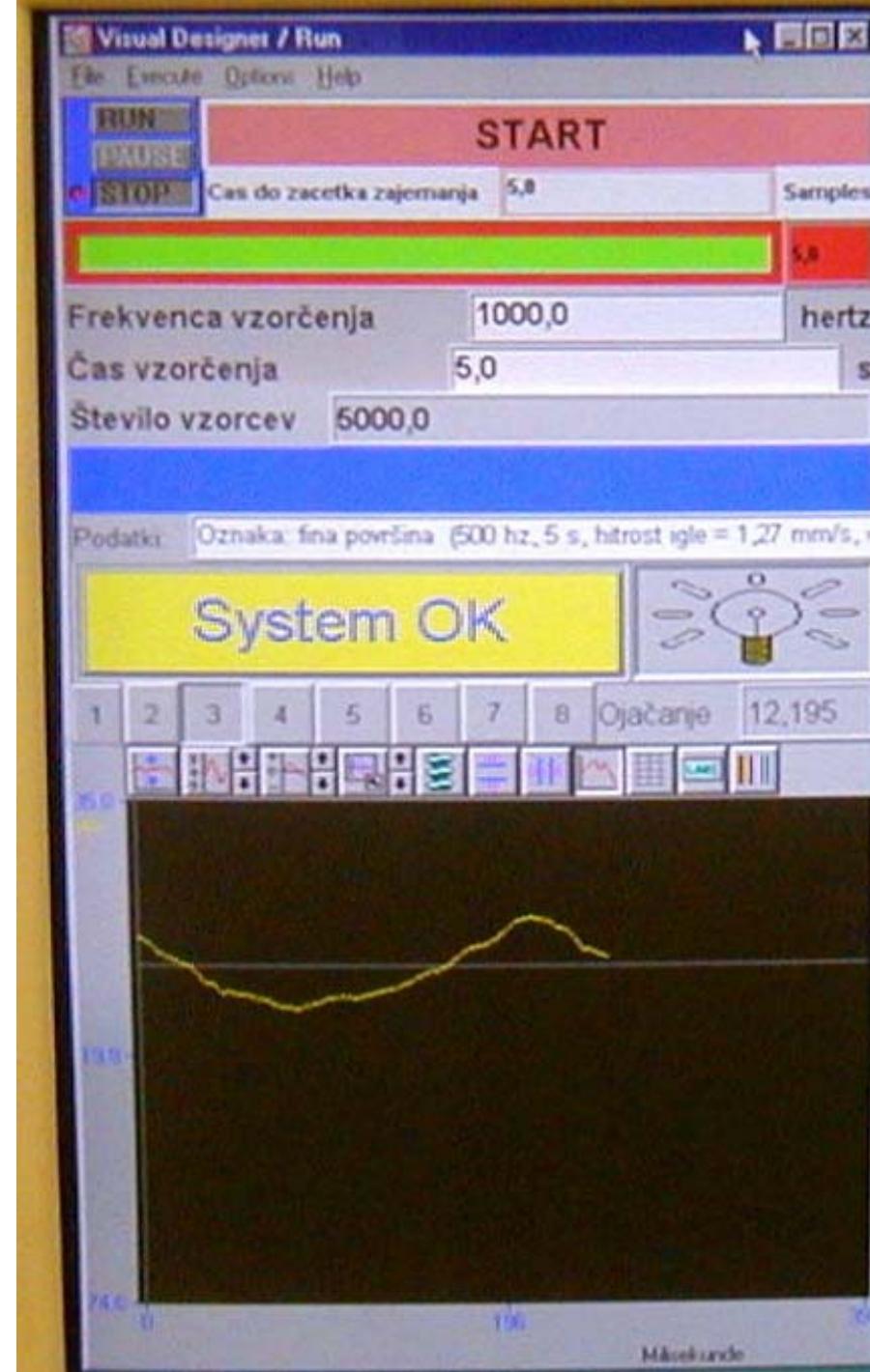




Nastavitev parametrov merjenja in prikaz merilnih rezultatov



Nastavitev parametrov za digitalizacijo in zapis rezultatov v digitalni obliki



Analiza dobljenih rezultatov: prikaz signala, izris histograma, avtokorelacijske spektralne analize

